

13 August 1968

25X1

TITLE: Image Analysis Program

Report No. TO-B 67-20 on Image
Analysis, Dated 21 April 1967

25X1

WORK PROGRAM: Infectious development experiment consisting of counting the silver halide grains isolated singles and in clumps that were not developed in a 21 step density tablet made with sub-mono grain layer model emulsion No-2-0056 obtained 21 June 1968.

PROCEDURES:

1. This experiment consists of making seven photomicrographs of step 11 in a 21 step density tablet exposed on sub-mono grain layer model emulsion, developed in D-19 5 minutes at 68° F, washed 31 minutes, treated to EK Co. Stop Bath 5 minutes, photo flo solution for 2 minutes and dried without swabbing. Step tablet not cleared in Hypo Fixing Bath.

2. Micrographs were printed high contrast in the positive form on 8 x 10 inches D.W. Matt Photo Paper.

3. Total grains undeveloped single isolated and those in clumps were counted.

4. Isolated undeveloped singles were counted and calculated to express percentage of total counted.

5. Any change in percent singles represents a development bias which arises from their difference in environment. The difference is a measure of the infectiousness of development.

6. See attachments 1 and 2.

ATTACHMENT # 1.**IMAGE ANALYSIS PROGRAM****13 AUG. 1968**

25X1

PHOTOMICROGRAPH PLATE NUMBER	21 STEP TABLET DENSITY STEP NUMBER	DENSITY READING	TOTAL UNDEVELOPED GRAINS COUNTED IN A GIVEN AREA AT 1700X.	TOTAL ISOLATED SINGLE UNDEVELOPED GRAINS COUNTED IN A GIVEN AREA AT 1700X.	TOTAL AVERAGE GRAINS COUNTED IN A GIVEN AREA AT 1700X. EMULSION N-2-0056 UNDEVELOPED RAIFILM.	TOTAL DEVELOPED GRAINS IN A GIVEN AREA AT 1700 X.	PERCENTAGE ISOLATED SINGLE UNDEVELOPED GRAINS COUNTED IN A GIVEN AREA AT 1700X.	PERCENTAGE OF TOTAL GRAINS DEVELOPED IN A GIVEN AREA AT 1700 X.
1.	11.	.34	190	31	870	680	3.56%	78.16%
2.	11.	.34	189	34	870	681	3.90%	78.27%
3.	11.	.34	196	28	870	674	3.21%	77.47%
4.	11.	.34	177	26	870	693	2.98%	77.65%
5.	11.	.34	183	31	870	687	3.44%	78.76%
6.	11.	.34	214	47	870	656	5.40%	75.40%
7.	11.	.34	232	40	870	638	4.59%	73.03%

EMULSION # N-2-0056**D-19 5 MIN. 68°F.**

IMAGE ANALYSIS PROGRAM

